## MODERN SAILING CRAFT.

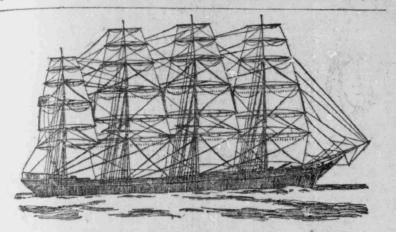
Store of Information About the Pilgrims of the Sea.

BY MCRGAN ROBERTSON. | called loyermast, topmast and topgal-author of "Spun Yarn," "Where Angels | lant mast,—the latter extending up-BY MORGAN ROBERTSON. Fear to Tread," etc.

(Copyright, 1900, by Morgan Robert, son.)

may be more or less overhang at either end, and difference in proportional details, but the keel, rounded bilge, wedge-shaped bow, and stern with swelling buttocks, or quarters, are found everywhere. The size of a sailing craft, with the combination of sails used in her make-up, is what classifies her as ship, bark, barkentine, brig, brigantine, schooner, sloop, yawl, lugger, or one of the host of lateen-rigged vessels known as the felucca type. Sails may be loosely classed under two general headings—square and foreand-aft. As the name implies, the former is square, or nearly so, and is hung by its upper edge to a spindlemay be more or less overhang at either

ward as a royal mast, and in large ships, farther up still as a skysailmast. The schooner-rigged jiggermast is in two parts-lower and topmast. Yards, sails and ropes, with a few exceptions, with the exception of scows, cata-marans and Chinese junks—the last in a class by itself—sailing craft of all na-tions are modeled on similar lines— the familiar shape of a rowboat. There may be more or less overhang at either



FOUR MASTED SHIP SHOWING COMPLETE RIGGING.

manner of handling a square sail is to haul it out and in on hoops sliding on the greased yard; and still another— as in the case of a "flying square-sail" or a stunsail—is to set it from the deck; but greased yards, flying square deck; but greased yards, flying square sails—and stunsails—light wings rigged out beside the larger square sails—are practically obsolete.

a mainsail, a fore-sail, mizzen, jigger, spanker or trysail, according to the type of the vessel and the name of the mast which supports it its characteristics are its immovable forward edge or luff, secured to mast hoops, and its gaff, which extends the upper edge. It may or may not have a boom at its lower edge, and the gaff may hoist from the deck, or remain fixed up aloft, while the sail travels out and in on hoops. Above this sail on schooners and large sloops is a triangular gaff-topsail, filling the space between the topsail, filling the space between the gaff and the topmast; and in racing yachts a large light-weather sail fitted with small spars to extend it out past the end of the gaff, and up above the topmast head, is called a club-top-

Jibs and staysails are triangular, and Jibs and staysalis are triangular rope, are holsted on a fixed, slanting rope, are holsted on a fixed, main mission is to support a mast from forward—which grips the upper edge, leaving the rest

the end of the yard, the other to the deck.

A lateen sail also hangs from a yard, but, the sail being triangular, the forward end of this yard is hauled down snug to the deck, and the after end is high in air. It is a picturesque ris, very common on Oriental seas.

A lateen sail also hangs from a yard, but, the sail being triangular, the from 500 to 1,000 tons register. Above this tonnage the full square rig is claimed to be more practical.

A further medification of the ship is the harkentine—about the happiest combination possible of the square and the schooner rig. Only the forest

ing the clews and body up to it, and building the whole on top of the yard in a lapering roll. A lower yard, however, does not hoist nor lower, and the clews are hauled down and made fast to the rail of the vessel. Another last to be taken off in bad weather.

deck, but greased yards, hying square sails and stun-sails are nearly obsolete.

So much for the ship, a complicated fabric requiring trained specialists in the handling, and raved over by certain sea poets as the most beautiful of Fore and aft canvas is in several distinct designs, the most common and important of which is the trapesium-shaped pattern of a sail boat's largest sall. As a sail alone, it has no name, unless "sebooner-rig" is a name; it is a mainsail, a fore-sail, mizzen, jigger, sanker or trysail, according to the

> was a wet ship, or badly overloaded. The men who danced attendance on those old-fashioned "stunsalis alow and aloft," and who were drenched to the sea poetry. skin by that "white, shivering cloud of spume," had no particular admiration for the rig. Most would have preferred a five-masted schooner with a donkey

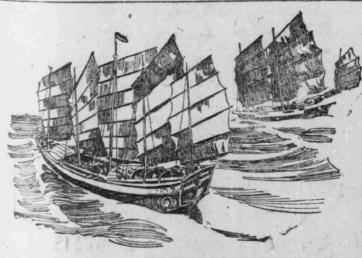
Next in order of importance is the bark rig—fore-and-aft canvas on the mizzenmast, square on the fore and main. This rig gives a vessel no special advantage, and is often a detriment in wearing ship (squaring all, but is hung to yards instead of gaff, and, when hoisted, about a quarter of this yard extends forward of the mast, leaving the forward edge free, but for the confining tension of the upper and lower corner—one secured to the each of the yard, the other to the deck.

Next in order of importance is the bark rig—fore-and-aft canvas on the droopy when he began running down the cook, but I didn't suggest there was any loss of appetite. From being an entirely sociable creature he seemed to find pleasure in sitting alone and glowering a good deal, and when I assumed a more cheerful air than usual he tried to explain himself by saying, in the weird veracular of down town, that the street had cold feet.

"That summer I knew Jack was droopy when he began running down the cook, but I didn't suggest there was any loss of appetite. From being an entirely sociable creature he seemed to find pleasure in sitting alone and glowering a good deal, and when I assumed a more cheerful air than usual he tried to explain himself by saying, in the weird veracular of down town, that the street had cold feet.

"The last familiar phase that always the crew, and much is saved in cost of running rigging. Barks may range Next in order of importance is the

the barkentine—about the happiest combination possible of the square and the schooner rig. Only the foremast carries yards and square sails, the main and mizzenmast being schooner rigged. This design of sail is offen used on board large ships for a spanker, or try-sail, on yawl-rigged smaller craft, on sailboats and on pleasure canoes; but wherever used, it is a compromise,—a makeshift where a full-cut sail with a gaff would be too



CHINESE JUNK.

masted, but modern experiment has added an occasional fourth mast,—square or fore and aft rigged; and this she may carry without losing her character, though the appellation "shipentine" has been suggested for her when the fourth mast is fitted with fore-and-aft or schooner canyas Part fore-and-aft, or schooner, canvas. But no new name has been invented for the full square-rigged four master; she is still a ship, like her three-masted.

arge. With sails patterned on these called a two-masted ship. She has no half dozen designs are dressed the sailing craft of the maritime nations; and, until lately, one and all have agreed that the square or ship rig is the most practical and economical for large craft.

For centuries the ship was three masted but wedges the sail with the square right of wind contact, and with her cumbersome square right, she was hard masted but wedges the sail with the seas. Possessing but two points of wind contact, and with her cumbersome square right, she was hard on the helm and offen missed stays.

the full square-rigged four master; she is still a ship, like her three-masted brig, or, with regard to slight difference of detail no longer considered, the



him with pained, anxious eyes, by tipevidently hasn't got far enough along
in her knowledge of the sex to realize
that there is a mighty big difference
in the best methods of taking care of
a sick woman and a sick man. Now,
we all know that a woman wants to
be coddled and cuddled, petted and
fussed over when she is ill. She grows
quite fond of her medicines, loves to
tuck up among pillows and discuss her
symptoms, and speak in a still, small

imm with pained, anxious eyes, by tiptoeing around the room, tickling his
poor pulse, pleading with him to eat,
hushing all normal, familiar sounds
and begging him every ten minutes to
tell me how he felt.

How to Manage a Sick Man.

"Treatment of that sort drives a
man either in a rage, out of his bed,
or puts him into alternate nervous
chilis and fevers of sheer fright. The

the doctor.

Must be Handled With Gloves.

"If there is one insult that a man more acutely resents than another," Mrs. Bliss continued, "it is illness, and he deeply objects to being reminded of it. He knows that he is then unmanned and more or less an object of amused pity to his own sex, so a sick husband must be handled with gloves. It is wifely tact that tides him over, and that is what our little over. shaped spar called a yard—which is fastened at its middle to the mast and is steadied by lifts and braces. It is set by hoisting this yard after the lower corners, or clews, are hauled down to the ends of a yard below, and is furled by lowering the yard, hauling the clews and body up to it, and building the whole on top of the yard in a lapering roll. A lower yard, however, does not hoist nor lower, and sapanker, it is made of the strongest. Like the foresail, topsails and spanker, it is made of the strongest. The clews are hauled down and made.

amused pity to his own sex, so a sick husband must be handled with gloves. It is wifely tact that tides him over, husband must be handled with gloves. It is wifely tact that tides him over, shead, you can flatter and stimulate should learn. She is really painfully obtuse. Last night she tried to put her white worsted shawl about his big, words in his vocabulary. It helps him, broad shoulders, made him change his seat, because she suspected he was in a draught, and reminded him of his spencer, is a spanker fitted to the mastrand out beyond all is another misnomer, the jibtopsail, which sets on the foretogallant stay.

The trysail, more aften called the spencer, is a spanker fitted to the main mast. Like the foresail, topsails and spanker, it is made of the strongest thus and reminded him of his spencer, is a spanker fitted to the mast and that is what our little friend out beyond all is another misnomer, the jibtopsail, which sets on the foretogalle after the sails; and out beyond all is another misnomer, the jibtopsail, which sets on the foretogalle after the sails; and out beyond all is another misnomer, the jibtopsail, which is wifely tact that tides him over, husband must be handled with gloves. It is wifely tact that tides him over, whead, you can flatter and stimulate should learn. She is really painfully obtuse. Last night she tried to put her white worsted shawl about his big to him that, though it suffers ter-inbushed. that is to say, directed colloquial language; though being newly married he spoke in a tone only she could hear and complied with all her requests, except the use of the shawl. In consequence she was hurt and huffy, and

scapes and daring adventures, he nods across the table at me and refers to the summer of his return from Cuba, when he had a very close call, and I say, with a sort of break in my voice: 'Oh, Jack, don't talk of it,' and he leaves the impression with his appreclative male listeners that he has faced

things than San Juan hill. When the Crisis Came.

"That summer I knew Jack was droopy when he began running down the cook, but I didn't suggest there was any loss of appetite. From being to find pleasure in sitting alone and glowering a good deal, and when I assumed a more cheerful air than usual he tried to explain himself by saying, in the welfd veracular of down town, that the street had cold feet.

"The last familiar phase that always"

EMILY HOLT.

a schooner and the square-rigged fore-mast of a brig. But the combination was not so successful as in the case of was not so successful as in the case of a bark; for the bark retained the short mizzenmast of the ship, and a com-paratively small spanker, easy to shift over in a following gale. But a brig-antine, with her longest mast aft, and, fitted to it, the large mainsail of a schooner, must, when running before a strong gale and in need of "jibbling." get that great expanse of canvas over against the full force of the blast. It is the position most trying to a schooner, and the brigantine has borrowed her one weakness—the largest sail farther-est aft. But with that mighty main-Throughout the Mediterranean, Red sail stowed and out of the way she may scud under her square forward can-vas as long and as safely as may her

Advantage of the Schooner.

larger sisters.

A lesser departure from the schooner-

The schooner is coming to the front. Originally of two masts—an enlarged sloop—she grew larger and acquired a third, then a fourth, and of late years a, fifth. There is now a fleet of five masted schooners sailing out of Atlantic coast ports, as large as the medium sized ship-rigged craft, and able to follow—and beat them—through any battle with wind and sea that may be met. A seven-master is soon to be launched from a Rhode Island ship-yard; and she may be followed by eight-masters. There seem to be no limit to the number of masts except the size of the hull; but it is noticeable size of the hull; but it is noticeable that though the masts increase in numthat though the masts increase in number they increase but little in length, the additional sail area coming of the extra masts. And, as a tribute to tradition, the builders still insist upon fitting the mast farthest aft with the largest sail, thus perpetuating the schooner's sole weakness. With her line of spars of the same length, the multi-masted schooner is the ugliest craft afloat, but, aside from the trouble in jibing the large after sail she is the handiest, and will, doubtless, supersede the square-rigged ship in supersede the square-rigged ship in deep water sailing. She can show as much canvas to a fair wind as can a ship, and in a head wind can sail two points closer and beat to windward in Sarsaparilla, did you? It is america's a breeze and sea that would throw

a ship ashore.

The stoop rig mainsail and jib, when mast Lore.

"The masts, named with regard to their place, are the foremast, mainmast and mizzenmast; when a fourth is added it is the jiggermast. Each square-rigged mast is divided into three sections, one above another,

ence of detail no longer considered, the brigatine—half brig, half schooner. She came into being in the days when gafftopsail and spinnaker—is the rig of sailboats, English cutters and racing yachts. It is too common to need comparison have decided that more speed too small for a brig was given the salient features of each—the large per sail erea can be produced with this right three sections, one above another,

HOW TO TREAT

HUSBANDS.

Mrs. J. Matrimonial Bliss Tells Ribout

John and the Measures.

John and the Measures.

Well, if she treats him like that I was a surface that he had a work on the head of t

symptoms, and speak in a still, small chills and fevers of sheer fright. The voice and make large, pathetic eyes of a suffering gazelle at her relations and make his sick room look cheerful and feeling himself strong, even in his weakness. "As to feeding a sick husband, I

and complied with all her requests, except the use of the shawl. In consequence she was hurt and huffy, and her eyes grew pink, and then he got madder and went out, by way of revenge, and stamped up and down the wet beach, reveling, no doubt, in the knowledge that she was wringing her hands on the piazza and longing to wet beach, reveling, no doubt, in the knowledge that she was wringing her hands on the piazza and longing to rush out and on her knees offer him his overshoes, but her pride and fear of his manif wrath held her at bay."

"And you think that's kind and tender and noble and"—began Miss Emily Lonely in wrathful amaze.

"No, Miss Emily," chuckled Mrs. Bliss, "but it's masculine and natural, and I've been all through it with my John. Did I ever tell you about the time that John Matrimonial Bliss, esq., banker, broker, after-dinner speaker and retired warrior, came down with the German measles?"

Miss Emily shook her head.

"No, Miss Emily shook her head."

"The last and most precious sacrifice a wife can make to her ill or convalescing lord is to yield her point in argument. Now, I don't mean a high and noble fortitude when he grows absurdly angry over some foolish trifle, or a pained Christian sile."

and retired warrior, came down with the German measles?"

Miss Emily shook her head.

"He doesn't dream to this day that he ever was the victim of so pesky a little ailment, but sometimes when he contradicts or stiffens himself to refuse his medicine. That attitude irritates, but I mean when he takes some strange but harmless notion in his strange but harmless notion in his have his way, and when anything must be talked over yield to him the rich and rare delight of accepting his view. Yield slowly, for he will want to thoroughly enjoy the sweets of victory, but yield nevertheless, and in after days you can resume your old, original ob-stinate position and he won't contest

it with you."
"It's a pity," remarked Miss Emily Lonely, as the lunch gong roared through the hall, "that you couldn't give some of that really sensible advice of yours to our little friend out there, moping so tearfully under the

EMILY HOLT.

In the English channel and along the French and Spanish coasts can be seen a picturesque craft about the size of two masted schooners called a lugger two masted schooners called a lugger. She carries three pole masts and a short bowsprit, and spreads three lofty lug sails and two or three jibs. Above the mainsail is sometimes set what might be called a club topsail, but is really a miniature lug. As her spars are proportioned like those of a ship or bark, she avoids the unsightliness of the American schooner, but, of course, can never compete with the latter in can never compete with the latter in convenience

sea, Persian gulf and along the shores of the Indian ocean can be found the lateen sail in all its combinations and modifications. Combined with a few square sails it is the main dependence of the three-masted xebec; hoisted on two masts with a triangular topsail spread slantingly between the two lateen peaks, it propels the settee; on one mast with a fib out ahead, it stamps a small craft as a tartan, and A least rig to the square was call schooner schooner, a two-masted craft, schooner rigged except that aloft on the fore were a square topsail and a topgallant sail in place of the foregafftopsail; but this craft is now as rare as the brig, plicity, with no embarrassing topsails or fibs, it makes up the dress of a few manning or fibs, it makes up the dress of a few lucca. A Persian garookuh carries one mast raking forward from near the center, and one lateen sail. An Arab

Lastly we come to the nondescript Chinese junk, a dingy brown scow model, with two, three or five shroud-less masts of any length and proporless masts of any length and proportion, stepped jown hatchways or over the side, with lug salls of bamboo matting stiffened by bamboo polinters, and the inevitable perforated rudder and painted eyes keeping lookout from the bows. The junk is as inscrutable as the race which designed her; but, as she can never go far to sea, she will never compete with other tweeting.

rigged. You never read of such cures

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PROGRAMME

For Concert at Lagoon, Sunday, Aug. 12th, By Olsen's Orchestra.

1-March, "The Picadore"......Sousa 2-Overture, "Reception"..Schleppegrell 3-Waltz, "Under the Moonlight"... Reginald DeKoven 4-"Down in the Deep Cellar," Clarionette solo by Mr. Sol Levy, 5—Selection, "Il Trovatore" ... Verdi 6—"Danse des Sultanes" ... Daniels 7—"Medley Overture" ... Beyer 8—"Colored Aristocracy" ... Bernard Concerts at 3:30 and 7:30 p. m.

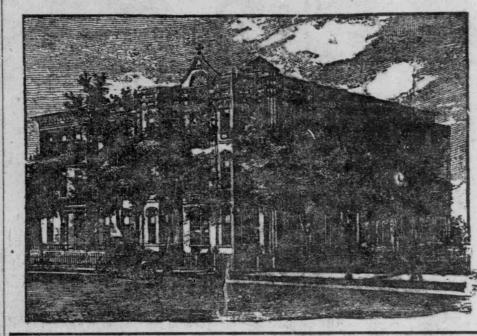
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